

### REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration are respectfully requested in view of the preceding amendments and the following remarks.

#### Claim Status/Amendments

Claims 1-11 remain pending in the application. Independent claims 1 and 8 have been amended to recite that the feedback system is arranged so that, if one of the optical modes has a light intensity higher than the other, its intensity is increased less by the amplifying medium so as to bring output modes to the same intensity level.

This new feature clarifies of the cited art. In fact, the amplifying medium has two functions. The first function is a classical function: the amplifying medium amplifies the two counterpropagating modes. However, the second function is not usual: the amplifying medium is a part of the feedback system as described in this new feature. The object of this new function is **not to obtain the maximal gain** on the two optical modes, but to obtain the same intensity in using **different optical gains** according to the sense of the counterpropagating optical mode. This new function is obtained by the variations of the state polarization of the modes by the optical assembly.

In connection with the claim objections the Examiner's position with respect to *In re Hutchinson 69 USPQ 139* is not well taken. This case law pertains only to the term "adapted." There is nothing in this case that would support the extrapolation cited. However, expressions such as "being intended" can be addressed in terms of being indefinite but not to "constitute a limitation in any patentable sense." If there is any disagreement as to the law established by this case, then it should be quoted *verbatim* from the case text.

#### IDS

An IDS which rectifies shortcomings noted on page 3 of this Office Action is submitted with this response.

Rejections under 35 USC § 102

The rejection of claims 1, 8 & 9 under 35 USC §102(b) as being anticipated by Hackell (US PAT 5,022,033) is respectfully traversed.

As noted above, the claims have been amended in a manner which distinguishes over the Hackell disclosure. Indeed, the claims have been amended to call for the amplification to be such as to **not obtain a maximal gain** on the two optical modes, but to obtain the **same** intensity by using **different optical gains** according to the sense of the counterpropagating optical mode. As noted above, this function is obtained by the variations of the state polarization of the modes done by the optical assembly.

Rejections under 35 USC § 103

The rejection of claims 2-7 & 10 under 35 USC §103(a) as being unpatentable over Hackell, is respectfully traversed.

The laser disclosed by Hackell is a laser emitting only one beam (see figure 1: only one output beam). The problem to obtain only one output beam with a high degree of stability is very different of the problem to obtain **two** output counterpropagating beams with the same intensity as per the claimed subject matter. The function of the feedback system is very different. Therefore claim 1, as amended, sets forth subject matter which is new and presents an inventive step in view of Hackell.

Double patenting

The gyrolaser as disclosed in the instant application (viz., USN 10/582 629) is a **two-mode** stabilized gyrolaser and **only** a two-mode gyrolaser. The gyrolaser as claimed in US 7 230 686 is a **four-mode** stabilized gyrolaser. In this latter gyrolaser, the use of four modes is a very important feature (see abstract – last sentence) and it is impossible to simplify this gyrolaser easily and obviously.

Furthermore, the gyrolaser as claimed in 686 comprises a solid-state amplifying medium. The gyrolaser as disclosed in the instant application comprises an **anisotropic** solid-state amplifying medium. Applicants assert that it is impossible to use the gyrolaser of instant

application with an isotropic medium.

These two differences are deemed sufficient to avoid double patenting.

Conclusion

It is respectfully submitted that the claims as they have been amended are allowable over the art which has been applied in this Office Action. Favorable reconsideration and allowance of this application are courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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